

## CLAIMS

The invention claimed is:

1. A system for processing sortation information spoken by a user,  
5 and for generating a return signal with a computer for transmission back to the  
user on a telephony system in response to sortation information spoken by the  
user, comprising:
- a wireless telephony set being operative to:
    - receive sortation information spoken by a user;
    - 10 send the sortation information to a first modem,
  - the first modem being operative to:
    - send spoken sortation information from the wireless telephony set  
to a second modem through the telephony system;
    - the second modem being operative to:
      - 15 receive spoken sortation information from the first modem;
      - send spoken sortation information to a computer; and
    - the computer being operative to:
      - receive the spoken sortation information from the second modem;
      - generate a return signal comprising an voice signal and a data  
20 signal in response to the spoken sortation information;
      - send the voice signal and the data signal to the second modem;
    - the second modem further operative to:
      - encode the data signal with the voice signal for transmission to the  
first modem through the telephony system;
      - 25 the first modem further operative to:
        - decode the data signal and the voice signal from the second  
modem into the separate voice signal and data signal;
        - send the voice signal to the wireless telephony set; and
      - the wireless telephony set further operative to:
        - 30 receive the voice signal from the computer.

2. The system of Claim 1, wherein the spoken sortation information comprises a delivery address.

3. The system of Claim 1, wherein the wireless telephony set  
5 comprises a transmitter being operative to send spoken sortation information to  
the first modem, and a receiver being operative to receive a return signal from a  
first modem.

4. The system of Claim 3, wherein the wireless telephony set further  
10 comprises a microphone being operative to receive spoken input from a user and  
a speaker being operative to broadcast the return signal received by the receiver.

5. The system of Claim 1, wherein the wireless telephony set further comprises:

15                   a base phone receiver being operative to:  
                     receive spoken sortation information from the  
                     transmitter, and  
                     send the spoken sortation information to the first  
                     modem.

6. The system of Claim 1, wherein the telephony system comprises a wireless telephone network.

7. The system of Claim 6, wherein the telephony system comprises a  
25 public switched telephone network.

8. The system of Claim 1, wherein the computer further comprises a telephony interface being operative to transfer spoken sortation information from the second modem to the remote computer.

# THE UNIVERSITY OF CHICAGO

9. The system of Claim 1, wherein the computer is further operative to execute a set of instructions containing a speech recognition routine to interpret the spoken sortation information.

5 10. The system of Claim 1, wherein the computer comprises a remote computer.

11. The system of Claim 1, wherein the first modem comprises a simultaneous voice and data (SVD) modem.

10

12. The system of Claim 11, wherein the second modem comprises a simultaneous voice and data (SVD) modem.

13. The system of Claim 1 wherein the return signal comprises a prompt for the user to respond to the accuracy of the spoken sortation information.

15

14. The system of Claim 1 wherein the return signal comprises a sortation instruction.

20

15. The system of Claim 1, wherein the first modem is further operative to decode the return signal into an voice signal and a data signal.

16. The system of Claim 15, wherein the first modem is further operative to send the data signal to a local computer.

25

17. The system of Claim 16, wherein the data signal is processed by the local computer, and the local computer instructs an associated printer to format or to print a label.

30

004037-0346250

18. The system of Claim 16, wherein the data signal is processed by the local computer, and the local computer displays the information on an associated visual display device.

5 19. The system of Claim 15, wherein the first modem sends the data signal to an associated printer to format or to print a label.

20. The system of Claim 15, wherein the first modem sends the data signal to an associated visual display device to display information.

10

21. The system of Claim 15, wherein the voice signal comprises audio instructions in response to the user's spoken sortation information.

22. A system for processing sortation information spoken by a user  
15 and for generating a return signal comprising a data signal encoded with a voice signal in response to the spoken sortation information, comprising:

a speech device with a speech encoder and a speech decoder, wherein the speech encoder is configured for receiving spoken sortation information from a user and encoding the spoken sortation information into a data signal, and  
20 wherein the speech decoder is configured for receiving a return signal based upon the spoken sortation information and decoding the return signal into a voice signal;

a computer configured for processing the data signal containing spoken sortation information from the speech encoder, and further configured for  
25 generating a return signal based upon the spoken sortation information, wherein the return signal comprises a data signal and an encoded voice signal; and

a network for communicating signals between the speech device and the computer, wherein the speech encoder sends the spoken sortation information through the network to the computer, wherein the speech decoder receives the  
30 return signal comprising the data signal encoded with the voice signal from the computer through the network.

24. The system of Claim 22, wherein the speech device comprises a wireless telephony set with a transmitter configured to send spoken sortation information to the speech encoder and a receiver configured to receive a return signal from the speech decoder.

26. The system of Claim 22, wherein the network comprises a local area network of computers.

28. The system of Claim 22, wherein the computer comprises a remote computer.

30. The system of Claim 22, wherein the return signal comprises a sortation instruction.



5

10

15

20

25

30

sending the return signal to the user through the base telephone receiver;

decoding the return signal into the data signal and the voice signal.

38. The method of Claim 37, further comprising,  
sending the data signal to an associated local computer operative to:  
generate a label using the data signal; and  
5 print the label in response to the spoken sortation information.

39. The method of Claim 37, further comprising,  
sending the data signal to an associated visual display device operative to:  
generate a visual display using the data signal and in response to  
10 the spoken sortation information.

40. The method of Claim 37, wherein the spoken sortation instructions  
comprise a delivery address or instruction.

15 41. The method of Claim 37, wherein the computer comprises a  
remote computer.

004037" 024225 250